

The Effect of Mastery of Technology and Financial Literacy on Accounting Student Competencies

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Abstract

The purpose of this study is to find out how technology mastery and financial knowledge of students at Universitas Pembangunan Panca Budi in Medan affect their accounting skills. The study involved 36 students who were randomly selected from a population of 233 students. Data was collected through an online questionnaire and analyzed using SPSS version 23. The findings revealed that financial knowledge significantly influences accounting competencies (t -value = 5.546, $p < 0.05$), while technology mastery does not have a significant effect (t -value = 0.276, $p > 0.05$). Simultaneously, both variables influence accounting competencies (F -value = 17.658, $p < 0.05$), with financial literacy being the dominant factor. These results underscore the importance of financial knowledge in enhancing accounting education.

Keywords: Technology Mastery, Financial Literacy, Student Competency, Accounting, Education.

INTRODUCTION

Nowadays, technology has become very important. Technology involves many things in our daily lives. Without us realizing it, we have entered a new era called the "digital era", where everything in the world can start its activities by using advanced technology, such as communication and information technology. Payment without using cash or cash, shopping through the internet, ordering online motorcycle taxis through phone applications, and many more. In addition, technology is beneficial for students. Where students can use technology to be able to explore without limits and add knowledge and insights related to their lectures. Not only that, technology can also be used as a means of developing skills obtained through free or paid courses or through YouTube. The development of technology is very rapid and makes all changes occur in all fields, especially education. Technology helps students, one of which is accounting students, in making financial reports. The way of recording in the early days, making financial reports was made manually, but now with the existence of applications that can help make financial reports and record transactions such as the Zahir application.

Financial literacy is closely related to financial management, which includes planning and monitoring. Planning work is used to determine how income will be used. Control is the evaluation of the efficiency of financial management, while management is the evaluation of the efficiency of management. People who can make the right financial decisions will not have financial problems in the future (Chinen and Endo, 2012). They will also have healthy financial behavior and can prioritize needs over wants. According to Lusardi and Mitchell (2014), financial literacy is a key factor in ensuring individuals can make informed decisions about savings, investments, and retirement, which directly influences their long-term financial well-being. Financial literacy is one of the components that can affect the ability of accounting

students. In accordance with the definition of previous researchers, financial literacy is defined as the process of measuring how well a person understands and uses their financial information. This definition includes many aspects that need to be measured. With various economic activities, accounting is one of the very important branches. If you want to be successful in managing the finances of a person or organization or institution, you must have accounting knowledge and skills. According to a study by Behrman et al. (2012), students who have higher levels of financial literacy tend to make more prudent financial decisions, especially in budgeting and debt management. By studying accounting, it is expected that students, especially students who take accounting concentration, will understand financial practices that are more fundamental and relevant to the world of work. Learning activities competency standards are needed to show how important learning accounting is. Students must demonstrate certain attitudes and behaviors, not just knowledge, as evidenced by the findings of Xiao and O'Neill (2016), who suggest that financial education can significantly improve students' financial behaviors and decision-making skills.

RESEARCH METHODS

This inferential statistical study utilized 233 odd semester accounting students at Universitas Pembangunan Panca Budi in Medan, North Sumatra, in 2023 (3rd semester and 7th semester).

Table 1. Data on the Number of Students of S1 Accounting Study Program at Universitas

Pembangunan Panca Budi	
Semester 3	Semester 7
104	129

Source: Panca Budi Portal, 2024.

The simple random sample method, or simple random sample, was used in this study. The sample was calculated using the Slovin formula and the standard error was 10% of the current population of undergraduate accounting students in North Sumatra. Sugiyono (2017) sets a 10% margin of error, or 0.10. The result is as follows:

Description:

n = Number of Samples

N = Total Population

e = Tolerance of Error (0.10)

$$n = N / (1 + (N \times e^2))$$

$$n = 233 / (1 + (233 \times 0,10^2))$$

$$n = 233 / (1 + (2,33))$$

$$n = 233 / 3,33$$

$$n = 69,96 \text{ or rounded up to } 70.$$

The influence of Technology Mastery and Financial Literacy is the independent variable in this study, and Accounting Student Competence is the dependent variable. Primary data is in the form of a questionnaire measured on a Likert scale. The questionnaire consists of statements with five choices, with sequential values from 1 to 5 indicating strongly disagree (STS), disagree (TS), agree (S), and strongly agree (SS). The lowest score is given to the answer with the lowest score, and the highest score is given to the answer with the highest score. This study processed data using the SPSS 23 program. Prior to that, each section of the questionnaire was tested online.

All analyses used included validity, reliability, classical assumption tests, such as data normality, multicollinearity, heteroscedasticity, hypothesis, coefficient of determination (R²), F test (simultaneous), and T test.

RESULTS AND DISCUSSION

The results of research related to mastery of technology and financial literacy in accounting students in North Sumatra, Panca Budi Development University in Medan, were conducted by distributing questionnaires online to accounting students from semester 3, and semester 7. The number of questionnaires received back was 45 out of 70 samples. And from the regression results with SPSS 23, 36 data can be analyzed while 9 data outliers occur.

Uji Validitas

Correlations

		X1.1	X1.2	X1.3	X1	X2.1	X2.2	X2.3	X2	X3.1	X3.2	X3.3	X3
X1.1	Pearson Correlation	1	.062	.504**	.761**	.049	-.353*	.066	-.128	-.037	-.034	-.080	-.064
	Sig. (2-tailed)		.720	.002	.000	.775	.035	.704	.457	.832	.843	.641	.711
	N	36	36	36	36	36	36	36	36	36	36	36	36
X1.2	Pearson Correlation	.062	1	.124	.542**	.486**	.369*	.464**	.585**	.446**	.183	.208	.336*
	Sig. (2-tailed)	.720		.473	.001	.003	.027	.004	.000	.006	.286	.223	.045
	N	36	36	36	36	36	36	36	36	36	36	36	36
X1.3	Pearson Correlation	.504**	.124	1	.789**	.342*	-.039	.257	.233	.230	.216	.241	.283
	Sig. (2-tailed)	.002	.473		.000	.041	.824	.131	.171	.177	.206	.156	.095
	N	36	36	36	36	36	36	36	36	36	36	36	36
Technology Mastery	Pearson Correlation	.761**	.542**	.789**	1	.410*	-.024	.367*	.316	.296	.171	.172	.258
	Sig. (2-tailed)	.000	.001	.000		.013	.887	.028	.061	.080	.319	.314	.128
	N	36	36	36	36	36	36	36	36	36	36	36	36
X2.1	Pearson Correlation	.049	.486**	.342*	.410*	1	.409*	.301	.754**	.522**	.309	.386*	.496**

Correlations

		X1.1	X1.2	X1.3	X1	X2.1	X2.2	X2.3	X2	X3.1	X3.2	X3.3	X3
	Sig. (2-tailed)	.775	.003	.041	.013		.013	.074	.000	.001	.067	.020	.002
	N	36	36	36	36	36	36	36	36	36	36	36	36
X2.2	Pearson Correlation	-.353*	.369*	-.039	-.024	.409*	1	.272	.787**	.328	.409*	.463**	.497**
	Sig. (2-tailed)	.035	.027	.824	.887	.013		.108	.000	.051	.013	.004	.002
	N	36	36	36	36	36	36	36	36	36	36	36	36
X2.3	Pearson Correlation	.066	.464**	.257	.367*	.301	.272	1	.684**	.684**	.338*	.496**	.618**
	Sig. (2-tailed)	.704	.004	.131	.028	.074	.108		.000	.000	.044	.002	.000
	N	36	36	36	36	36	36	36	36	36	36	36	36
Financial Literacy	Pearson Correlation	-.128	.585**	.233	.316	.754**	.787**	.684**	1	.672**	.477**	.603**	.718**
	Sig. (2-tailed)	.457	.000	.171	.061	.000	.000	.000		.000	.003	.000	.000
	N	36	36	36	36	36	36	36	36	36	36	36	36
X3.1	Pearson Correlation	-.037	.446**	.230	.296	.522**	.328	.684**	.672**	1	.216	.508**	.694**
	Sig. (2-tailed)	.832	.006	.177	.080	.001	.051	.000	.000		.205	.002	.000
	N	36	36	36	36	36	36	36	36	36	36	36	36
X3.2	Pearson Correlation	-.034	.183	.216	.171	.309	.409*	.338*	.477**	.216	1	.693**	.798**
	Sig. (2-tailed)	.843	.286	.206	.319	.067	.013	.044	.003	.205		.000	.000
	N	36	36	36	36	36	36	36	36	36	36	36	36
X3.3	Pearson Correlation	-.080	.208	.241	.172	.386*	.463**	.496**	.603**	.508**	.693**	1	.923**
	Sig. (2-tailed)	.641	.223	.156	.314	.020	.004	.002	.000	.002	.000		.000
	N	36	36	36	36	36	36	36	36	36	36	36	36
	Pearson Correlation	-.064	.336*	.283	.258	.496**	.497**	.618**	.718**	.694**	.798**	.923**	1

Correlations

		X1.1	X1.2	X1.3	X1	X2.1	X2.2	X2.3	X2	X3.1	X3.2	X3.3	X3
Accounting Student Competencies	Sig. (2-tailed)	.711	.045	.095	.128	.002	.002	.000	.000	.000	.000	.000	
	N	36	36	36	36	36	36	36	36	36	36	36	36

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Through significance value

- Significance value <0.05 concludes valid
- Significance value > 0.05 concludes invalid

It is known through the output above, showing that the significance value of X1, X2 and X3 is 0.000, which is <0.05, concluding that it is valid.

Reability Test

Reliability Statistics

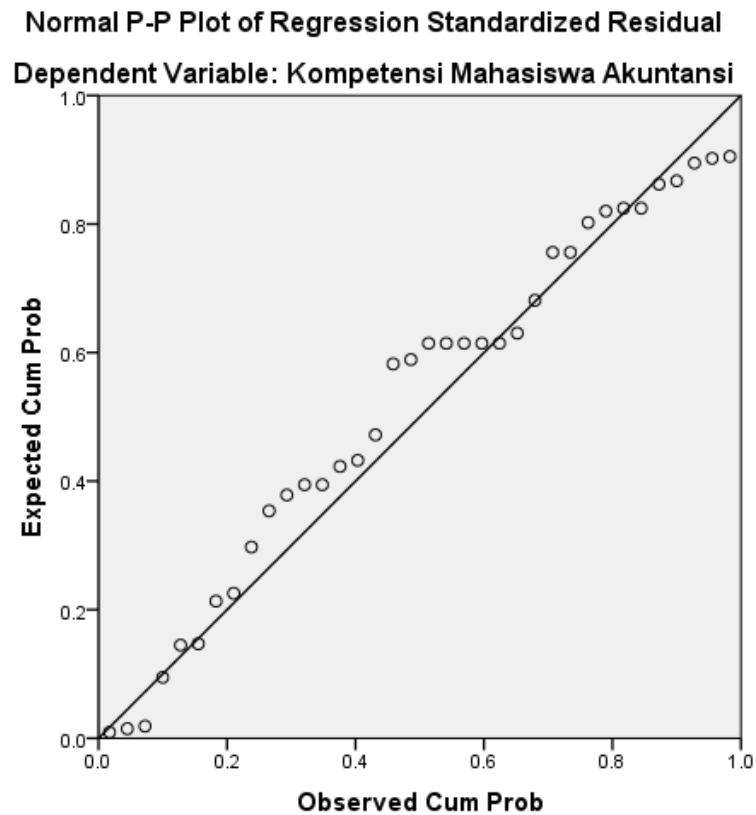
Cronbach's Alpha	N of Items
.781	9

Source: SPSS

According to Imam Ghozali, variables are considered reliable if the Cronbach's Alpha value is more than 0.70. The results above show that the conclusions are considered reliable with a Cronbach's alpha value of 0.781, or more than 0.70.

Normality Test (Kolmogorov-Smirnov)

According to Imam Ghozali (2011: 161) the regression mode is said to be normally distributed if the data plots (dots) that describe the real data follow the diagonal line. For more details, you can use the Kolmogorov-Smirnov test.



In the Kolmogorov-Smirnov table, the Asymp Sig Unstandardized residual is 0.071, which indicates that the data is normally distributed. This is because in its provisions, an Asymp Sig value of less than 0.05 indicates that the data is not normally distributed and vice versa.

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
Normal Parameters ^{a,b}	N	36
	Mean	.0000000
	Std. Deviation	1.18049410
Most Extreme Differences	Absolute	.140
	Positive	.088
	Negative	-.140
Test Statistic		.140
Asymp. Sig. (2-tailed)		.071 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Multicollinearity Test

According to Imam Ghozali (2011: 107-108) multicollinearity symptoms do not occur if the tolerance value is > 0.100 and the VIF value is < 1.000 .

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.281	2.284		.999	.325		
Technology Mastery	.050	.183	.035	.276	.785	.900	1.111
Financial Literacy	.730	.132	.707	5.546	.000	.900	1.111

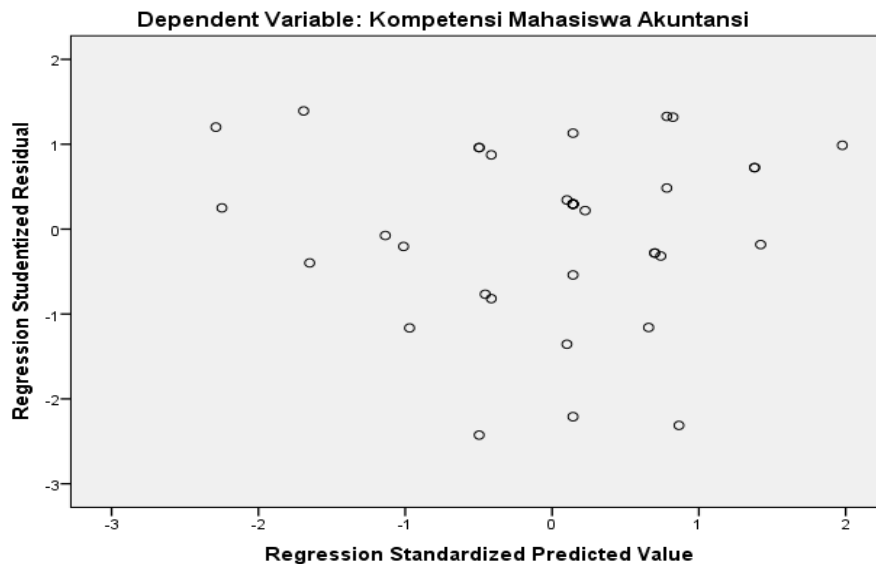
a. Dependent Variable: Accounting Student Competencies

Table Coefficients shows that there are no symptoms of multicollinearity because the tolerance value is more than 0.100 and the VIF value is less than 10.00.

Heteroscedasticity Test

According to Imam Ghozali (2011:139) heteroscedasticity does not occur in scatterplot images that do not have a clear pattern (wavy widening the narrowing) and the points are scattered above and below the number 0 on the Y axis.

Scatterplot



There are no symptoms of heteroscedasticity, as shown by the scatterplot image.

Autocorrelation Test

If the durbinwatson value is between du and $(4-du)$, there are no autocorrelation symptoms, according to Imam Ghozali (2011: 111)

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.719 ^a	.517	.488	1.216	1.726

a. Predictors: (Constant), Financial Literacy, Technology Mastery

b. Dependent Variable: Accounting Student Competencies

Durbin-Watson table values with 5% significance are found in the distribution of Durbin-Watson table values based on k (2) and N (36). These values are d_u (1.587), Durbin-Watson (1.726), and $4-d_u$ (2.413). The Durbin-Watson value is not between d_u and $4-d_u$, which indicates symptoms of autocorrelation.

Hypothesis Test



H_{01} : Mastery of Technology has a significant effect on Accounting Student Competencies.

H_{02} : Financial Literacy has a significant effect on Accounting Student Competencies.

H_{a1} : Mastery of Technology does not have a significant effect on Accounting Student Competencies.

H_{a2} : Financial Literacy has no significant effect on Accounting Student Competencies.

If the Sig value < 0.05 , then there is an influence of the independent variable (X) on the dependent variable (Y).

If the Sig value > 0.05 , then there is no effect of the independent variable (X) on the dependent variable (Y).

Partial Test

Coefficients^a

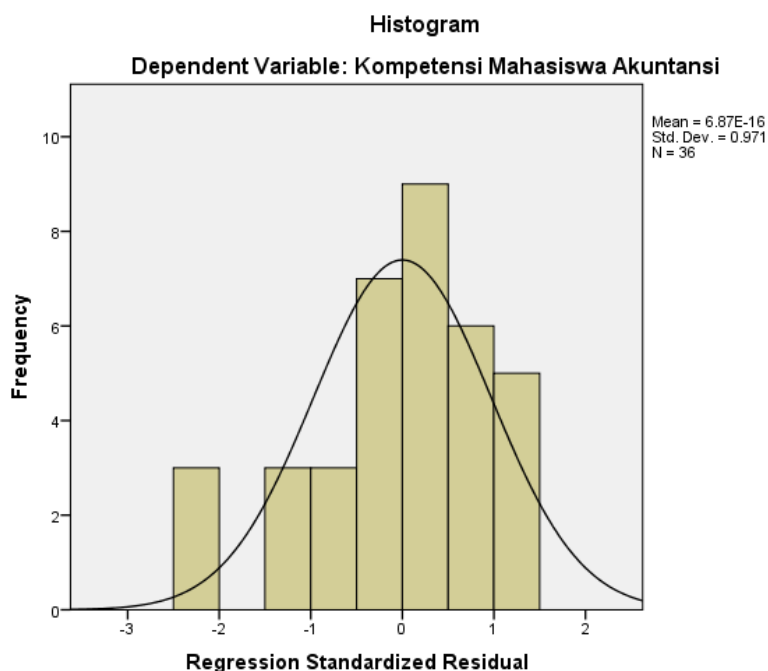
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.281	2.284		.999	.325		
Technology Mastery	.050	.183	.035	.276	.785	.900	1.111
Financial Literacy	.730	.132	.707	5.546	.000	.900	1.111

a. Dependent Variable: Accounting Student Competencies

Formula $t_{tabel} = (\alpha/2 ; n-k-1) = (0,025 ; 33) = 2,035$

In the table above, the Sig value of X1 of 0.785 indicates that H_{01} is rejected and H_{a1} is accepted, which indicates that there is no effect of Technology Mastery on Accounting Student Ability. Sig X2 value of 0.000 indicates that H_{02} is accepted and H_{a2} is rejected, which indicates that there is an effect of Financial Literacy on Accounting Student Ability.

- The t_{count} value of X1 is 0,276
- The t_{count} value of X2 is 5,546



Based on the previous regression curve, X1 and X2 have a positive influence on Y.

Simultaneous Test

The independent variable (X) affects the dependent variable (Y) simultaneously, if the Fcount value is greater than Ftable, according to V. Wiratna Sujarweni (2014: 154). Wiratna Sujarweni (2014: 154).

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	52.197	2	26.099	17.658	.000 ^b
Residual	48.775	33	1.478		
Total	100.972	35			

a. Dependent Variable: Accounting Student Competencies

b. Predictors: (Constant), Financial Literacy, Technology Mastery

Formula for finding $F_{table} = (k; n-k) = (2; 36 - 2) = (2; 34) = 3.275$, Based on the table above, it shows that the value of $F_{count} > F_{table}$ ($17.658 > 3.275$). So, the independent variable (X) affects the dependent variable (Y) simultaneously.

CONCLUSION

This study reveals that financial literacy significantly influences accounting students' competencies, with a significance value of 0.000 and a t-value of 5.546, which exceeds the t-table value of 2.035. Conversely, technology mastery does not show a significant impact, with a significance value of 0.785 and a t-value of 0.276. Simultaneously, both variables contribute to

students' competencies, as evidenced by an F-value of 17.658, which is greater than the F-table value of 3.275. These findings indicate that while technology supports the learning process, financial literacy plays a more critical role in enhancing students' ability to prepare financial reports. Therefore, strengthening financial literacy is highly recommended to improve the competencies of accounting students.

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